



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/002,000	03/08/01	THANNER	09794829-004

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EXAMINER

GONZALEZ, J

ART UNIT PAPER NUMBER

2834

DATE MAILED: 10/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/802,000

Applicant(s)

THANNER, HERBERT J.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Specification

X The disclosure is objected to because of the following informalities: Certain pages of the specification and claims have unclear words due to holes at top of the page. Formal copy of disclosure is required. Appropriate correction is required. See MPEP 608.01

Drawings

- ✓ 1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "3" has been used to designate both conductive strip and clamping point. Correction is required.
- ✓ 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 4. Correction is required.
- ✓ 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 5, 11a. Correction is required.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the conducting strip extending on the resonator disclosed in claim 1 and the second conducting strip extending from an electrode and both conducting strip extending on the resonator as disclosed in claim 4 and two mounting elements been connected to one another as disclosed in claim 5 and the mounting structures on which the mounting elements are

placed and the electrical contact surfaces as disclosed in claim 12 and must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, what is meant by one-free electrical point of contact? The resonator and the mounting elements do not have adhesive or just on the point of contact? ✓

In claim 5, how are the two mounting elements connected? It seems from figure 6 that they are separated? ✓

In claim 11, what is meant by the base structure being in resilient fashion by means of an elastic element? Is the base rigid or resilient (elastic)? X ✓

In claim 15, are the mounting elements and the base "one-piece" or several different pieces put together? X ✓

In claim 16, what are the mounting arrangements? The mounting arms? The resonator? Electrodes? Base? X ✓

In claim 17, where do the strip extend radially?

In claim 18, what is meant by "the resonator lie essentially in one plane, said plane being essentially parallel to a plane of the resonator"? Are there two resonators? If there is one resonator, how can it be parallel to itself? How the forces lie parallel to the X ✓

plane of the resonator? Which plane is it? Any plane of forces can be parallel to a particular plane of the resonator.

In claim 20, what is meant by "strip extends from the surface region having the electrode beyond the edge thereof, up to a region of transition to an adjacent surface region"? Beyond what part is the strip extending to? What region is the strip going to? What is meant by the transition of a surface? Are the surfaces changing? Which surface is it? Is it the surface of the resonator or of the electrodes?

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Zumeris in view of Yoshinaga et al.

Zumeris discloses a piezoelectric resonator plate 10 having electrodes 18, 20, two electrical conductive strips (see figure 26D). The piezoelectric is held by two mounting elements 392 without the use of adhesive. Also, the mounting arms are constructed as oblong (see figure 27).

However, Zumeris does not disclose that the conductive strip extend radially.

On the other hand, Yoshinaga et al discloses for the purpose to obtain a high bonding accuracy in the areas of the piezo devices and the electrodes thus improving

the strength of the piezo device, that the conductive strip extend radially around an axis of the piezo device (see figure 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a piezoelectric device as disclosed by Zumeris and to include conducting strips for the purpose to obtain a high bonding accuracy in the areas of the piezo devices and the electrodes thus improving the strength of the piezo device as disclosed by Yoshinaga et al.

Conclusion

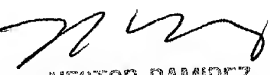
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

October 22, 2001


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